

National Standards Strategy for the United States

National Standards Strategy Panel Discussion

(Edited Transcript)

Introduction by Raymond Kammer, Former Director
National Institute of Standards and Technology

Moderated by Mark Hurwitz, President and CEO
American National Standards Institute

Panelists:

- Oliver Smoot, Chairman
American National Standards Institute
- Steven Oksala, Vice President, Standards
Society of Cable Telecommunications Engineers
- James Thomas, President
American Society for Testing and Materials
- Gregory Saunders, Director, Defense Standardization Program Office
U.S. Department of Defense
- Mary McKiel, Director, EPA Standards Program
U.S. Environmental Protection Agency
- Robert Noth, Manager, Engineering Standards
Deere and Company
- Belinda Collins, Director, Office of Standards Services
National Institute of Standards and Technology

DR. KAYSER: Of course, every partnership involves a two way street, and I think that NIST has been very lucky over the years to have had the best partners that any organization could want.

We will now move on to the next part of the program, which is a panel discussion of the U.S. National Standards Strategy. I am going to start this part of the program by introducing Ray Kammer, who will then introduce the moderator of the panel discussion.

As many of you know, Ray was the Director of NIST from 1997 through December of 2000, and prior to that he held a variety of leadership positions at NIST, and in the Department of Commerce. These ranged from the Deputy Director of NIST, which he held for a total of about 15 years, Deputy Under Secretary for Oceans and Atmospheres in the National Oceanographic and Atmospheric Administration; to Chief Financial Officer, Assistant Secretary for Administration, and Chief Information Officer for the Department of Commerce.

Ray has for a long time been a good friend and ardent supporter of the documentary standards community, and a leader in that community. As Jim Thomas mentioned, Ray served on the Board of Directors of ASTM. He has also served in leadership positions within ANSI. Ray played a key role in the creation of the National Standards Strategy by challenging the standardization community in 1998 to develop such a strategy. It is a great honor and privilege for me to turn the floor over to Ray Kammer.

MR. KAMMER: You are going to hear in a few minutes from the thought leaders who helped develop the National Standards Strategy, and their perspectives on this strategy.

For me, the interesting question is why is the National Standards Strategy developed now. There have been in my career at least three previous attempts to bring the community together and organize it in some way, all of which failed pretty rapidly. This time we have succeeded in getting at least this far.

I have one possible explanation. It is almost speculative, but we all know that product standards create value. Standards do things, such as aggregate markets, and provide a forum for representatives from both supply and demand to have conversations. They compare economies of scale that benefit both the vendors and the buyers. Standards facilitate product compatibility and interoperability, and that has been true for the past hundred plus years.

I think something changed, perhaps 15 years ago, and I wasn't smart enough to notice it. About 15 years ago there began to be cases where a condition of access to particular markets was where and how the standard was developed. This is a trend that has been increasing. Maybe you could call that exclusivity of access, for which I can think of three kinds of existence groups.

There is the *de facto* group, in which I am the head of a company and I won't buy from you unless you manufacture to a particular set of standards. Furthermore, rather than a particular standard, I insist that you manufacture to a body of standards that were developed in a certain way. There is also the *de jure* case, in which there are countries that have recently said we will only participate in certain standards development and in no other. Then there is a special case of the *de jure* standards, in which a standard starts out like a voluntary product standard, and ends up being converted and adapted in some fashion into a regulation that is administered by the government. These changes have increased the stakes a lot, and my speculation is that that is a significant motivator for why there is a National Standards Strategy now.

Now, I will introduce my friend, Dr. Mark Hurwitz. He was named President and CEO of ANSI by its Board of Directors on July 1, 1999. Before joining ANSI, Mark served as the chief executive officer and the executive vice president of the American Institute of Architects. He is also a past executive vice president of the Building Owners and Managers Association International. Dr. Hurwitz earned a doctorate in administration from Temple University, in Philadelphia.

DR. HURWITZ: Thanks so much, Ray. You are such a great example of what a retired old man looks like. Many of us went this morning to pick Ray up at the rest home to bring him to the event today, and so I hope that you will just treat him well and so on, because he does have to be back by 6:00.

Since he is such a young man to retire, it makes some of the rest of us working, at least this one, a bit jealous at times. But I certainly want to join everyone else in thanking Ray for his incredible leadership and his friendship and his support during his years as Director of NIST, and even before, for his interest in standards. That interest continues today. Certainly this panel is in some ways a tribute to his courage, his challenge, and of course the incredible follow-up of Dr. Belinda Collins, whom you have heard referred to so many times here today.

Since the very diverse 55-member Board of Directors of the American National Standards Institute unanimously adopted the National Standards Strategy last year, it has received wide attention, both domestically and internationally. As a matter of fact, during its development and draft stages it received significant attention internationally as we received feedback to our drafts that we had not deliberately solicited from the international community. We found this to be quite interesting.

Since the adoption of the strategy, about which you are going to hear much more in a few moments, there have been Congressional hearings. I have now even seen some preliminary drafts of a European standards strategy, which is interesting as well.

The National Standards Strategy drives just about everything that ANSI does. Our annual budget for Fiscal 2000 is built and based upon implementation of the National Standards Strategy. Even our staff evaluation system, which is related to the budget and specific goals and so on, is all tied towards focus on implementation for the National Standards Strategy. Each of our four governance councils—the Government Member Council, Organizational Member Council, Consumer Member Council, Company Member Council—are all focusing and working very hard on implementation plans for the National Standards Strategy.

Well, what is the National Standards Strategy? Many people, as I look around this room, have served on task forces that helped to create it. Others have been around it for some time, and have had an opportunity to participate in other meetings where it was discussed. Just to be sure that we are all talking from the same page, we will present a brief overview of the 12 cardinal principles of the National Standards Strategy, so that we have the same base for the rest of our program.

To do this we have chosen a good friend and a hard working guy who was a key player in this task force, where we heard about Jim Thomas and Dr. Collins being involved, along with lots of people in this room, including many of the panel members. The group turned to this guy and said, “Okay, we have worked this long, and now you take everything that we have gotten and put together the next draft.” That next draft was pretty close to what ultimately was adopted as the National Standards Strategy. So who is better qualified than Steve Oksala to come up here and spend a few moments with us and provide a framework for us for the National Standards Strategy?

MR. OKSALA: Thanks, Mark. Arati Prabhakar earlier today said something about being amazed that we have created a strategy at all, let alone one that seemed reasonably coherent.

What I want to do in just a couple of minutes before our panel is to set some context as to how we got to where we are, and what the meat is. If there were a defining characteristic of the process of creating the National Standards Strategy, it was the incredible diversity of interests, even among the small group of people who worked on it regularly. I sincerely believe that you could make any statement about the standards process you like, and you would not get unanimity on it, no matter what it was. We all came from different positions, but what we found, though, is that we could agree on a few things.

First of all, we could agree on some basic elements of fair and due process, the kinds of things that have made the voluntary standards system strong for many years. We also found, interestingly enough, that we could agree on some new things, like the need to do it in a very timely way, and the need to have coherence in the process. We also could agree on the fact that one size does not fit all. Each industry sector has different issues, and different problems, and so you can’t simply say, well, here is the strategy, cookie cutter, and everybody follow it.

With those agreements, what we were able to do with the National Standards Strategy was develop a framework for all the interested parties to work through and develop some synergy to solve problems moving forward. We did not develop a top down prescription. We did not develop a set of rules that said here is what you are going to do. We did not develop, as the late and unlamented Soviet Union did, five-year plans.

So the strategy is not that kind of thing. What it is, is a set of initiatives, a set of principles which define areas that we believe are important. Each of the organizations in the process should take a look at them, and work out what they can do best.

The meat of the strategy, which you all have in your package so you have no excuse for not reading it, is a series of strategic initiatives covering broad areas. Within these strategic initiatives is a set of tactical initiatives for industry, for government, and for standards developers, which will move the U.S. standards system to a higher level. To finish my little part of this presentation, I will show you what those initiatives are.

First, government use of voluntary consensus standards through public-private partnerships. We have heard a great deal about this today from some organizations who have been doing it for a lot longer than I have been alive, let alone active in the standards world. We understand that this is important. Not all organizations have done it quite as well, so we will need to work this issue further. The need for standards for health, safety, and the environment is a strong tradition in the United States, but one in which we can still do better.

Responsiveness to consumer issues. This issue is one that I think is a relatively recent phenomena for most standardizers. As consumer interests, whether it be ergonomics, or safety, or any of a variety of things, become more important, the representation of consumers becomes even more important in the standards world.

Including the non-traditional standards developers in the process. Twenty years ago this was not a problem, but you have heard today about a variety of consortia and fora, and other organizations. Somehow we collectively—the U.S. standards system—need to figure out a better way of incorporating those activities into an overall program.

Improving processes internationally. Concentrating particularly on ISO and IEC is important because that's where a great deal of the international work of interest to ANSI members is done. Several things can be done. For example, Keith Termaat talked earlier about weighted voting as one possibility. There are many things that we need to look at to make the international standards process as good as it can be. One activity is an outreach program for those outside the United States. Many of you know perfectly well that there are other countries that spend a great deal of money trying to convince other nations, particularly developing nations, to use their standards. The United States has not historically done much of that, and so we recommended a real outreach program to get U.S. standards and U.S. technology better known overseas.

Greater efficiency in the U.S. system. Standards have focused on due process and fairness, and less on efficiency, but greater efficiency is something that industry is demanding these days.

Greater coherence. Since we have a decentralized system with lots of strengths to it, one of the potential problems is that people work across purposes, and so we need to address that.

Improved communications. We need to improve communications between standards developers, and between industry and standards developers, and between the government and industry, among all these parties.

Establish a stable funding mechanism. If you have been in any standards developing organization, you know that money is always a problem, whether it is selling documents, or dues, etc. It is a constant aggravation that takes our attention away from the things that we really want to be doing, which is developing good, solid consensus standards.

And that's my little summary. If you read the document, you will find all of those initiatives and lots of tactical initiatives to go with them. And with that I will return to the hot seat.

DR. HURWITZ: We have turned up the lights because we have all been sitting here all day, listening to wonderful presentations. There were numerous times that I wanted to ask some questions, but of course time did not allow that. We are trying to get an awful lot done in one day. But this session is for you, the audience. We have assembled a panel for you whose biographies are all within your packets. I wish I could remember the exact quote from the Lake Wobegone Radio Series, but everyone up here is beautiful, handsome, and above average. They are all eminently qualified, and representative, as well.

On this panel, we have Oliver Smoot, Chairman of the Board of ANSI, who brings a perspective from a trade association in the standards business as well. You have just heard from Steve Oksala, who is now with a trade association, but was with UNISYS and brings an interesting perspective. Jim Thomas, our friend from ASTM, a standards developing organization (SDO). Greg Saunders, from the Department of Defense, brings a government perspective, from what was at one time the largest standards developer in the world, and whose use of standards is just phenomenal. Mary McKiel is from EPA, and of course you know their significant involvement in standards as well, and brings another government perspective. Bob Noth, from Deere and Company, is a very, very significant player in a very important sector, both domestically and internationally and brings an industry perspective. Finally, our friend, Dr. Belinda Collins. I can't say her name without saying our friend, but it's true. Dr. Collins brings a NIST perspective, as well as another government perspective.

We would like for you in the audience to identify yourself, and tell us to whom you are addressing your question. Just to get started, I will ask the first question, and give you some time to collect your thoughts. Let me start with Bob Noth. Bob, if I might, what has been the reaction of industry to the National Standards Strategy?

MR. NOTH: Obviously I can't speak for all of industry because I don't represent all of industry, of course, while I am up here. But of those that I know and interact with from various industry sectors, I would say that their reactions have been positive for the most part, and neutral in the worst case scenario at this point. In fact, I have only heard one negative at all, and that was from a trade association representative. I think their position was that they were working very effectively in both the national and international standards community, and didn't want anything in terms of a national standards industry hurting them. I think in general that there is nothing in the strategy itself that does any harm to anybody's current tactics relative to international standardization.

The one thing that is probably a problem with the strategy is that the people that I have talked to, and the people that actually know about the strategy, are probably a relatively small number compared to the whole of U.S. industry. That suggests obviously that we need to continue to aggressively market the strategy to all of industry, small and medium size, as well as large. It needs to be given top billing on the agendas of the major players in the standards community, to call attention to it. We need more sessions like this to explain what it is about and how it can be used effectively to improve the U.S. approach to standardization.

DR. HURWITZ: Good. Thank you very much. Has that stimulated you in the audience enough yet? Yes?

MR. MESERLIAN: The question is the problem that I am having is that our standards are very specific. The gentleman from Motorola said that the key to the National Standards Strategy is having all members of the ICSP be responsible for utilizing any private sector standards development organizations, health and safety standards, and to basically champion them.

In ours we have specific cases where we have requirements for NIST, the FDA, CDC, and the Consumer Products Safety Commission, to take action. I am having a big problem trying to get the CPSC to take action on this. Will NIST be able to recommend that the CPSC representatives do their job, and have these standards considered in a regulatory agency?

DR. HURWITZ: Dr. Collins, since you Chair the Interagency Committee on Standards Policy (ICSP), perhaps you would be the best person to respond?

DR. COLLINS: Thank you very much, and thank you, Mr. Meserlian, for your question. As you know, the Interagency Committee on Standards Policy is a coordinating committee of the Federal Government, which reports on the use of standards by Federal Agencies, participation in the process, and use of any agency unique standard. We have in fact circulated information on your standards to all ICSP members, and advised them of your role in developing standards. We have also circulated information on other standards developing organizations. There are some 600 in the United States, so it makes it difficult to give preference to one standards developer over another. I do know that CPSC is aware of your standards and is examining them in the course of their regulatory process. A key role of the ICSP is providing and sharing information on what is happening in the voluntary standards arena. What we have done to circulate information about standards in general, and specific standards procedures in particular.

DR. HURWITZ: Thank you. And I apologize to the panel, because I didn't hear the beginning of that. Let me just again repeat that I am looking for questions regarding the National Standards Strategy, its content, and how it was developed, and how it is being implemented. If you have questions about individual organizations, and you want to talk to some people on the panel, I think that ought to take place after this session off-line. I apologize, Dr. Collins, for not more carefully screening the question.

Well, Dr. Collins, I will keep you up there though. What are the ICSP and the Federal Government doing to implement the National Standards Strategy, and what are NIST's plans in that regard?

DR. COLLINS: The ICSP is responsible for coordinating standards-related activities across agencies. As the standards strategy notes, a key issue is that the Federal Government use voluntary consensus standards.

We have heard a lot of discussion today about NIST's role in that. I want to emphasize that the only reason you heard so much about NIST today is because it is our 100th anniversary. On this panel, we have representatives of two other Federal agencies—DoD and EPA—and we also have at least NASA and the FDA in the audience. All of these agencies are strong users of voluntary standards, and strong participants in the process.

All Federal agencies are committed by law to use voluntary standards to the extent practicable. We are now seeing a marked increase in the number of such standards used by Federal agencies, with an accompanying decrease in the number of agency-unique standards developed. The ICSP is continuing to emphasize Federal use of voluntary standards, while working on new tools for reporting on activities, such as the web-based reporting system that NIST implemented this year.

NIST and the ICSP plan to take a look at the idea of possible Federal use in some fashion of the ANSI accreditation process. We also plan to expand our activities to ensure that Federal agencies are aware of relevant voluntary standards activities, relevant training, and work in partnership with ANSI and other SDOs to know what standards are being developed, and how those meet agency needs. We continue to be aware that agency needs reflect those of the private sector communities that we serve.

As we think about the global market, I will also point out, that NIST plans to continue its outreach program. As I said at the beginning of today's session, we have 20 representatives from Russia and the Newly Independent States in attendance. They are here as part of a 2-week training course at NIST on the U.S. voluntary standards community and system. They will then spend time in the private sector looking at telecommunications, in this particular case, but we have done a number of such workshops looking at different sectors. For example, we have one coming up in a couple of weeks targeted at electrical safety in the Asia Pacific region.

NIST intends to continue doing this sort of outreach, but I want to stress that it happens in partnership with all of the people up here on this stage and in the audience. NIST serves to facilitate, and I think that is our key role within the ICSP.

DR. LYONS: I am asking this question to ANSI officials. My question is with regard to performance based standards. In recent years the Department of Defense has made a really extreme effort to convert their acquisition specifications to performance based specifications. That involves, of course, adopting largely private sector standards. In the course of doing this, I have had the opportunity to listen to CEOs from business react to this, and in general one finds that large companies think this is wonderful. If you listen to CEOs from very small businesses who are used to manufacturing against a very detailed prescriptive specification, such as small truck manufacturers for the Army, for example, you hear a very different story. This is very upsetting to them. Their statement is we don't have a design staff, and we don't have the capability to make a proposal against a performance based acquisition specification. The response that the Generals give them is, you know, somewhat indefinite. But, it seems to be a real problem, and my question to the ANSI folks is what feedback do you get from small businesses to the performance based emphasis?

DR. HURWITZ: I would ask Mr. Smoot, Chairman of the Board to pick up your question. Other ANSI board members may also want to help out as well.

MR. SMOOT: Well, Mark may have chosen me by my title, but I come from an industry where there are a large number of companies that range from one and two person shops, all the way up to mega-firms. Those firms that do business with the Federal Government would fail the small business definition by the time that they get into government business support for IT products. If the products are custom built, it is not a problem in software. It is not actually a problem for IT products for specialized hardware. So I think we would have to ask somebody who deals with machined metal, or other hardware, where you need an infrastructure or plant where you build things.

DR. HURWITZ: I wonder if Bob Noth has some insights here.

MR. NOTH: Thanks, Mark. I could see that coming. I think you make a very good point. I am not much into government contracting, and so I really can't answer the specific question. I will point out, though, that one of the things that we are doing in our industry is to use performance based specifications. We fully believe in performance based specifications, as opposed to prescriptive ones, because performance based gives us the flexibility to be innovative and creative in how we meet those specifications.

Prescriptive specifications tend to cool innovation. Where we have done innovations, and have asked our supplier community to help us, we still are fairly prescriptive in our specifications of what parts we want made. Alternatively, we partner with the supplier and let them participate in the innovation process with us, so that we supplement any lack of engineering staff that they have.

I assume other industries are doing the same. What little bit I know, and maybe Greg might have a comment on that, would be that many of the defense contractors that I was aware of were fairly large firms, or consortia of firms, who then would probably have the capabilities to do the necessary engineering, and then they would use subcontractors to provide parts in the same kind of way.

DR. HURWITZ: Greg, can you help us with this question? I mean, DOD has about a hundred billion dollars per year in procurement or more.

MR. SAUNDERS: Yes. Let me say a couple of things. I once testified before Congress and started out my testimony about performance specifications by trying to describe a number two wooden pencil in performance terms. It is an extraordinarily difficult thing to do, and when you are finished, pencil manufacturers don't recognize it.

Let me say that the Department of Defense has not thrown away all detailed specifications. Where we are moving to performance specifications is largely in larger things. We want to buy aircraft based on the required performance. When we are buying spare parts, we still have literally thousands of design specifications. We do deal with firms that range all the way from Boeing-sized to single person contractors, and we do recognize the issue of not having design staffs.

Although in some measure—and this sounds a little cold, but in some measure—that is not really our problem. What we want to do is describe the performance that we need and allow industry the greatest flexibility to meet those needs. If they decide to meet those needs using old military specifications and standards, that is just fine. They can continue to use those documents. There are still a good many of them out there, and many of the those that have been either cancelled or turned over to a voluntary standards organization contain a great deal of detailed design information that is still usable. DOD still buys products built according to these detailed specifications.

Let me relate this back a little bit to the National Standards Strategy. One of the goals in the National Standards Strategy does say that we want to give preference to performance specifications. But, in virtually every case, for every specification, and every standard, there is some balance between giving detailed design requirements, detailed process requirements, and performance requirements. What we want to do is swing a little more towards the performance side, and a little less toward hemming in our contractors with a detailed design, or a designed process, that would prevent them from being innovative and giving us the best that they know how to give us.

DR. HURWITZ: Thank you. Sir, identify yourself and your question, please.

DR. BRANSCOMB: Lewis Branscomb, on my fifth retirement. Jack Goldman used to say that if the manufacturers of buggy whips at the turn of the century had understood that their job was to fulfill a performance requirement as a vehicle accelerator, they would still be in business.

My question derives from the fact that 30 years ago I broke my pick on a massive study for the Congress on how to get this country metric. The only thing I have to show for it is a death threat from a citizen who was for the metric system, but thought we should have a hundred degrees in the circle instead of 360. And my question is pretty obvious, and that is if we have a National Standards Strategy, where is the accelerated metric conversion in it?

MR. OKSALA: I have to confess that I don't recall that subject coming up at all during any of our meetings, and I think that was probably an individual decision about discretion being the better part of valor.

DR. HURWITZ: I think Director Kammer might have some insights there.

MR. KAMMER: As Dr. Lew Branscomb, I suspect, already knows, there are no examples in the world of countries converting to metric without it first having been made mandatory through some legislative process or some directive from the government. Time and time again, we as leadership of the country have walked up to this issue and said, no, I don't think the American public wants us to order them to do it.

The irony of this is that your automobile is completely metric, unless it is very, very old, except the tires, odometer, and speedometer. So, English unit wrenches, of which I have a handsome and complete set, don't fit anything that I own anymore. So a lot of the industrial world has converted, but the interface with the consumer has not, and I predict won't unless there is a legislative instruction.

DR. HURWITZ: Okay. Steve, and then Ollie.

MR. OKSALA: I think that is a perfect example of something that I mentioned earlier in regard to the strategy. I think we all agreed that you simply couldn't standardize at the top level. That is, that each industry had to go about finding its own way through these issues, and one of the consequences of that is that you don't necessarily hear about it. In fact Keith Termaat and I were talking earlier today, and he made the simple comment that the metric battle is over for the automotive industry, and the reason is that the industry decided that it was in its best interests.

Now, there are other industries. I believe the aerospace industry has a different view about the issue. But that's where it gets solved, at the specific industry level. So you won't find a National Standards Strategy that says "thou shalt" do much of anything actually, because it is really important to do it within industry sectors where the solutions fit that industry.

DR. HURWITZ: Great. Ollie, did you have something to add to that?

MR. SMOOT: I just wanted to remind everybody that I think it is now 9-1/2 years and ticking until the European Union will say that the final extension has run out, and we are going to go to single, hard metric labeling in the European Union, which presumably by then will be some number of countries larger. I will repeat what Steve said. A lot of industry has made this conversion, unless they have very good reasons why not. Aerospace is a good case study in why one might not want to take that risk. It really is the American public that is living in a bubble. But if you can't change their mind, I think that industry that has to compete both locally and globally will all go metric and just won't tell the American public.

DR. HURWITZ: Yes, sir, a question?

MR. RIPPEY: Bill Rippey, from NIST. When I promote standards, one of the arguments that I make to the users of technology is that if we have a good interface standard for the components in your system, you will have more choices of component vendors. As a result, when you buy a brand new system, you will be able to mix and match. If you have an old system, and one component wears out, you won't have to go back to the original company, but you can shop around for a different company. First, is that a good argument for standards? Two, do you think that is upsetting to vendors of technology? If there is a problem with vendors accepting this argument, how can we make it more palatable to vendors of technology?

DR. HURWITZ: If there anyone in specific that you would like to have respond to that question? Okay. Bob.

MR. NOTH: It is a good argument if you are in the supply industry, and it is a good argument if you are a consumer. But the large OEMs probably object to it, in the sense that they are trying to differentiate themselves, and they probably have an after market parts business that they are trying to keep focus in. So that doesn't mean that OEMs don't still support standardization. It just means that you will find some negative reactions in the OEMs. In the supply industry the reaction can be mixed, too, though because many of the suppliers want to differentiate themselves. I will use the electrical connector industry as an example. There is no interchangeability in electrical connectors, only from brand to brand to brand. They are all proprietary within their own lines, but they are not interchangeable, and so from an industry perspective, those suppliers aren't going to buy into standardization because they are trying to differentiate their product line uniquely.

MR. OKSALA: Yes, just to add to that. One of the things that I found to be a very effective test for the success of standardization is considering it to be an exercise in the elimination of low value product differentiation. If the product differentiation value is high in the perspective of the vendor, then they are not going to be very amenable to standardization. If it is low, or if they are being outnumbered 800 to 1, then they will. So it becomes a competitive issue. If you are lucky enough to have a monopoly or quasi-monopoly on a design, then you are not going to pay much attention to standards, and you probably will be successful.

I actually think the answer to the question is slightly different. I don't think any vendors will get upset at you for referencing standards. They just may not agree with you, they may not be responsive to you, and if you can't find other vendors, then I guess they are right.

DR. HURWITZ: Thank you very much. Yes, sir?

MR. FRENCH: Jim French, with the American Institute of Aeronautics and Astronautics, and I am also a member of the ANSI Executive Standards Council. Now, within ANSI, we talk a great deal about—and in fact we promote—accreditation. Yet, in the strategy we are advocating reaching out to consortia. Now, many of the consortia couldn't qualify for ANSI accreditation. So how do we work together this seeming contradiction?

DR. HURWITZ: Thank you. We hoped for that question. Ollie?

MR. SMOOT: I sure wish I had had two hours this morning for my talk, because there were a lot of things that could be said, and this is one of them that got very little attention.

ANSI represents the U.S. societal interests in standardization and conformity assessment. It doesn't represent the ANSI accredited standards industry. So in my view we have actually been laggard in reaching out, because we already have as ANSI members some very large developers of standards documents that don't process their documents through ANSI's approval process. We also have some large developers of specifications who are not accredited, but they see an interest in being an ANSI member. While they are consortia using different methods, many of them face some of the same policy issues, especially if they would like their documents be accepted globally as accredited standards developers do. After all, they serve the same user base as accredited standards developers do. They simply provide a different service. So to that extent, I think there ought to be an identity of interest that would cause them to want to be ANSI members. What we—as ANSI—need to do, is to pull ourselves together, and figure out our value statement, and actually reach out to these organizations that do want to work with the rest of the ANSI members in improving the overall system, both domestically and internationally.

MR. THOMAS: I would just like to follow up. I think the question can be taken two ways. Is there an objection to having consortia being members of ANSI? I would think that absolutely there should be no reason not to want to cast a net, and have all of those that are involved in issues pertaining to standards, and the application of standards for trade to be part of ANSI.

Then there is another question as to whether some of the basic fundamental principles that have driven the U.S. consensus standardization process related to openness, balance of interests, representation from all the affected interests, and all those conditions, have become essential elements of the U.S. consensus process. The follow-up question is whether or not ANSI would change its accreditation criteria to essentially create some kind of a system for accrediting organizations that may not fulfill all those fundamental principles, approve them, and offer them recognition for the development of an American National Standard. ANSI currently does this through its accreditation process. There are actually a couple of different issues all wrapped into that one question. It really is a matter of the degree of comfort you will have if you move in a direction whereby groups of like-minded companies, essentially not with all the balance of interests, are accredited to develop American National Standards. Is that the direction that ANSI wishes to go?

I think there are some issues that will have to be resolved within ANSI as it determines what role consortia will play, and decides exactly what part of the ANSI process, or the ANSI policy framework that the consortia will fit into.

MR. OKSALA: One of the reasons that this comes up as a strategic area where we felt that we needed to say something, is that in what I will characterize as the hi-tech industry, and certainly the computer business, what we have noticed is a rapid increase in the number of consortia, and a decline in the participation in formal standards bodies. I know a number of companies that have said that they were spending just as much money on consortia, as they ever did on standards. I think the same is true in the qualifications industry as well.

To the question of whether we in the formal standards process are failing to provide what our customers want, then we at least need to look at that. Now, I am familiar with a number of consortia, and know that there are some that are not accredited by ANSI, precisely because they don't want to follow the kinds of due process and fairness rules that ANSI accreditation brings.

There are others who say, well, we are international, and so why would we want to be accredited by an American organization. There are still others who just don't know how the U.S. standards system works. There is no simple answer, but the point of the strategic initiative for ANSI is to look at this issue to understand why organizations are going in this alternative route. Then we can determine what if anything that we in the standards system can do to have a more coherent process.

MR. NOTH: Mark, just one little addition to that. I don't think that all technical specifications, and everything else, need the same level of public review as those that might affect health, safety, and the environment. I think we heard similar ideas from a couple of speakers this morning that not all standards may need to be considered as international standards for particular areas or applications. It appears that there might be room for different developmental processes and levels of consensus if we can figure out how to break down the word "standard" into various classifications. If we could apply a different process to those classifications, it might make some sense. We have not been able to effectively do that as yet, but I think we ought to consider trying it. We tend to lump all standards into one category and one process so one of the reasons we put consideration of consortia type standards into the strategy was to force us to consider different possibilities.

MR. SMOOT: Bob said very much what I wanted to say, except that I wanted to point out that we have a great deal of input from regulatory agencies in the development of the strategy that basically said that we have the OMB A-119 Circular (and the National Technology Transfer and Advancement Act) that give us some guidelines. In addition to fulfilling our statutory mandate, we have to demonstrate certain things. We have to show that we meet the statutory requirements, and frankly documents that come from too “loosey-goosey” an organization aren’t going to—they are going to get challenged. So the pressure from them was actually on ANSI to consider maybe tightening up the accreditation process. I would like to hear Mary McKiel from EPA address this topic, since she comes from a regulatory agency.

DR. HURWITZ: I do have a few questions about consortia that I do want to ask, but first I will ask Dr. McKiel to address us. From a standards perspective, what is the difference between the National Standards Strategy and the National Technology Transfer and Advancement Act of 1995 (NTTAA) which requires Federal agencies to use voluntary consensus standards? Does having both really mean anything?

DR. MCKIEL: I would characterize it this way. The NTTAA directs agencies to do two things. It directs agencies to use voluntary standards when it is consistent with the mission of the agency and its budget, and if it is practicable. The second thing that it directs us to do is to participate in the development of those standards. The OMB A-119 Circular elaborates the direction given in the law and gives us guidance. It also explains what we have to report to Congress every year through NIST and OMB on how well we are doing to implement the law.

OMB and Congress are at this point particularly interested in knowing if there is an existing voluntary standard, and if it is applicable to a regulatory action, that you explain why you didn’t use it. Now, there were other things that we were asked to report, such as how many people do we have involved and a couple of other things. Congress has made it clear that a big highlight for them is that an agency had better be able to explain to the public why they did not choose to use an existing standard in their regulatory and procurement actions.

This gets to one of the points which the gentleman who is sitting at the microphone brought up a little earlier, that the law and the circular give the individual agency the authority not just the responsibility, but the authority— to make the determination of whether or not a standard is applicable. It also gives the authority to the individual agency to determine the process for making this determination. That’s really key for understanding, because the NTTAA and the OMB circular are directed inward to tell government agencies what to do, how to relate on an agency basis to standards developing organizations, and through the ICSP, how to coordinate with one another.

The National Standards Strategy is really directed towards the whole federation. It is all of us. It is not just for the government. From a government perspective it gives us a road map of how to implement that part of the OMB circular that tells us to communicate with the SDOs. Furthermore, the strategy can help us in our relationship, not only with one another, but also in putting together issues that may not be individually realized within a particular agency, but which are important to the U.S. Thus, each agency has the ability to get with other agencies and the private sector academia, consumers, organizations, and sit down and say that, as a whole, here is what the picture looks like.

I don’t have a big part in this, but I understand where you are coming from. So down the road, it may be important. I think that what our Chairman, Ollie Smoot, brought up is also really important. The National Standards Strategy is a great and wonderful thing.

In terms of who knows about it, we have got a lot of work to do. I can tell you from a regulatory agency point of view. I am the EPA Standards Executive so, of course, I know about it. My job is to make sure that the other 20,000 people in EPA also know about it. One of the issues there that is important to the regulated community is that EPA delegates a lot of its authority on regulations to the States. This gets to another part of the strategy. If we really want the strategy to work so that we have got people understanding not only reading off the same page, but also knowing that there is a page, we really have to get the States involved. This is particularly true for those of us who are in the regulatory agencies. But it is a two-way thing. We have to provide communication and outreach based on our regulatory relationships with the States, and industry also has to provide education and outreach to State regulators. They may not seem like they are your best friends all the time, but the only way we are going to get this strategy really on target down the road is to work together to try and make the community larger.

DR. HURWITZ: Thank you very much. I am being yanked and pulled, and lights blinking at me saying it is time to sum up, because I understand that we started a few moments early. So therefore, I apologize, sir, and perhaps you can submit your question in some other form. To sum up, there were a lot of great questions asked and great answers, of course. Some other issues that I had hoped to be brought up were that the greatest challenge we have is with implementation.

The answer from my perspective would be for everyone to become knowledgeable and committed, and try to report back to us on a regular basis. We will be putting a network in place for that, to report the actions that are being taken by industry, SDOs, government, and consumer organizations, to move forward and implement the National Standards Strategy.

On behalf of the audience, I want to thank this panel that was assembled here today. You have got a lot of horsepower up here. I think we could have sustained a lot longer dialogue, and a barrage of even more controversial questions. I had some great ones to ask all of you, but I am getting yanked over here by Belinda's well-trained team. Since they are directly linked with an embodied chip to the atomic clock, then I am up against difficult odds.

So I want to thank the panel on behalf of the audience. Would you please join me in thanking your panel?

(Applause.)

DR. HURWITZ: And, the panel, would you join me in thanking the audience for listening and participating.

(Applause.)

DR. HURWITZ: Thank you. And with that, I think I turn it back over to Rich.

DR. KAYSER: We really are in the home stretch now. Last, but not least, we are going to have one more presentation on history and perspectives. Dr. Lewis Branscomb will give that presentation. Dr. Branscomb is the Aetna Professor of Public Policy and Corporate Management Emeritus at the John F. Kennedy School of Government, at Harvard, and the Director Emeritus of the School of Science Technology and Public Policy Program in the Belfer Center for Science and International Affairs.

Dr. Branscomb was the Director of the National Bureau of Standards, now NIST of course, from 1969 to 1972, and he was Vice President and Chief Scientist of the IBM Corporation from 1972 to 1986, when he joined the faculty at Harvard. He has received a very long list of honors and awards, and he has written extensively on a wide variety of topics, many of them having to do with science and technology, and innovation. It is my pleasure to introduce Dr. Branscomb.